Docket No. 0229-0785P Appl. No. 10/725,459 Amendment dated May 10, 2005 Reply to Office Action of December 10, 2004 Page 2 of 20

AMENDMENTS TO THE SPECIFICATION

IN THE ABSTRACT OF THE DISCLOSURE:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure. A marked-up copy of the Abstract has been provided below.

Abstract

A method and device for determining force exerted on a rolling vehicle wheel are disclosed. Firstly, data on functionality a relationship between a force exerted on a vehicle wheel and a physical parameter such as strain of the radius part of the wheel at predetermined measuring positions are obtained. and using Using the obtained data on the functionality relationship, a formula for the force is made. Then, the vehicle wheel is measured for the physical parameter during rolling, and using the measured physical parameter and formula, the force is worked out calculated. The force may be a vertical force, lateral force, longitudinal force or self aligning torque. The physical parameter may be the magnitude of a radial strain.

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IN THE SPECIFICATION:

Please add the following header immediately before line 2, page 1:

BACKGROUND OF THE INVENTION

Please add the following header immediately before line 16, page 1:

SUMMARY OF THE INVENTION

Please add the following header immediately before line 14, page 2:

BRIEF DESCRIPTON OF THE DRAWINGS

Please add the following header immediately before line 1, page 3:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please replace the paragraph beginning on page 3, line 5, with the following rewritten paragraph:

Here, a vehicle wheel 2 comprises an radially outermost annular part 2a contacting with the road surface to cause friction against the road surface, and a radius part 2b2 extending radially outwardly from a hub attached to a vehicle axle towards the annular part 2a. In the case of an automobile, as shown in Fig.1, a vehicle wheel 2 generally comprises a tire 2a and a wheel 2b. The tire 2a may be not only a pneumatic tire, a but also solid tire or the like. The wheel 2b comprises a rim 2b1 on which the tire is mounted and a wheel

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disk 2b2 between the rim and a hub attached to a vehicle axle. The wheel disk 2b2 is the

above-mentioned radius part, and thus it is meant for not only a disk-like relatively thin part

but and also radius rods, spokes and the like.

Please replace the paragraph beginning on page 9, line 24, with the following

rewritten paragraph:

In this example, as since the sensors 3 are fixed to the wheel disk 2b2, these the

sensors are rotated together with the wheel. Therefore, to transmit the measured data, a

wireless transmission system is employed between the vehicle wheels 2 and the vehicle

body, which comprises a transmitter TR on each wheel 2b and a receiver RE disposed on

the vehicle body. The transmission system may utilize radio waves, lightwave lightwaves

or electromagnetic induction.

Please replace the paragraph beginning on page 10, line 14, with the following

rewritten paragraph:

As Since the sensors 3 are moved during while the wheel is rotating, it is necessary

to locate the sensors 3 with a sensor-locating device TG.

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Please replace the paragraph beginning on page 12, line 7, with the following rewritten paragraph:

The analog output of the sensor 3 is usually very small. Therefore, a linear amplifier AMP is used. But However, if the sensor output is nonlinear, a nonlinear or equalizer amplifier AMP is preferably used. if If necessary, an analog to digital converter may be included in the amplifier AMP.